

ABSTRACT OF THE INVENTION

The invention provides a method of inhibiting growth of a microsatellite instability (MSI)-positive tumor. The method is practiced by introducing into an MSI-positive tumor a nucleic acid molecule encoding a RIZ1 polypeptide and expressing the RIZ1 polypeptide in the tumor in an effective amount to inhibit growth of the tumor. Also provided is a method of determining the MSI status of a tumor. The method is practiced by determining in the tumor the number of adenosine (A) nucleotides in a poly(A) tract of a RIZ nucleic acid molecule in the tumor. An abnormal number of adenosine nucleotides in a RIZ poly(A) tract indicates that the tumor is MSI-positive.